

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/538,481
Source: IFWO
Date Processed by STIC: 8/23/06

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IFWO

RAW SEQUENCE LISTING

DATE: 08/23/2006

PATENT APPLICATION: US/10/538,481

TIME: 08:41:37

Input Set : A:\271245.sub.seq.list.081706.txt

Output Set: N:\CRF4\08232006\J538481.raw

3 <110> APPLICANT: Mitsukan Group Corporation
 4 Goto, Hidetsugu
 6 <120> TITLE OF INVENTION: Structural gene responsible for high temperature tolerance
 in acetic
 7 acid bacteria, acetic acid bacteria transformed with said gene, and
 8 acetic acid fermentation using said transformants.
 10 <130> FILE REFERENCE: 271245US0PCT
 12 <140> CURRENT APPLICATION NUMBER: 10/538,481
 C--> 14 <141> CURRENT FILING DATE: 2005-06-07
 16 <150> PRIOR APPLICATION NUMBER: PCT/JP03/15542
 18 <151> PRIOR FILING DATE: 2003-12-04
 20 <150> PRIOR APPLICATION NUMBER: JAPAN 2002-356844
 22 <151> PRIOR FILING DATE: 2002-12-09
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 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 1313
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Gluconacetobacter entanii
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 36 tggcaggaaa aacgcattgga ccgggcgggtg cccatgcctc cggtttccgt gctcaagccc 240
 37 ctccacggcg atgaaccgct gctggaggaa gcgcttgaaa gcttctgcac gcaggattac 300
 38 ccgcagatgc agatcgtctt tggcgtacag gccgaagacg atgcggcgat cccgatcgta 360
 39 caacggttga tggaaaccca cccgatgtg cagatggaac tggtgattga cccaccttc 420
 40 cacgggctca accgcaagat cggcaacctg atcaacatca tgacgcgcgt gaagcatgat 480
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 42 ggcgccatgg tgcccgacaa tgcggcctg gtcacgacgc tgtacgcggg gctgcccgcg 600
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 44 gtgatgctgt cactctacct cgggcggcag gactgccttg gggcgacaat ggcgctgcgg 720
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 46 gcgatactgg gccgttacgt gcgtgaccgt ggcaaggata tcgccattgc cgcgtgcatg 840
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 52 gtcatggttg gcagtgtcac tggcacgcgg gttgcatggc gtgggcagac aatgcatgtc 1200
 53 acgccccatt cggtcatgac accacgatcg caaccggctt ccccggtga ctgaccgcgc 1260
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 59 <210> SEQ ID NO: 2
 60 <211> LENGTH: 393
 61 <212> TYPE: PRT

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70 Ser Arg Phe Arg Trp Gln Glu Lys Arg Met Asp Arg Ala Val Pro Met
71              35              40              45
72 Pro Pro Val Ser Val Leu Lys Pro Leu His Gly Asp Glu Pro Leu Leu
73              50              55              60
74 Glu Glu Ala Leu Glu Ser Phe Cys Thr Gln Asp Tyr Pro Gln Met Gln
75 65              70              75              80
76 Ile Val Phe Gly Val Gln Ala Glu Asp Asp Ala Ala Ile Pro Ile Val
77              85              90              95
78 Gln Arg Leu Met Glu Arg His Pro Asp Val Gln Met Glu Leu Val Ile
79              100             105             110
80 Asp Pro Thr Phe His Gly Leu Asn Arg Lys Ile Gly Asn Leu Ile Asn
81              115             120             125
82 Ile Met Thr Arg Val Lys His Asp Val Leu Val Ile Ser Asp Ser Asp
83              130             135             140
84 Ile His Val Ala Pro Asp Tyr Leu Arg His Val Val Gly Ala Met Val
85 145             150             155             160
86 Pro Asp Asn Val Gly Leu Val Thr Thr Leu Tyr Ala Gly Leu Pro Ala
87              165             170             175
88 Ser Ser Thr Leu Pro Arg Leu Leu Ala Ala Cys Gln Ile Asn His Asn
89              180             185             190
90 Phe Leu Pro Gly Val Met Leu Ser Leu Tyr Leu Gly Arg Gln Asp Cys
91              195             200             205
92 Leu Gly Ala Thr Met Ala Leu Arg Arg Ser Met Leu Asp Glu Ile Gly
93              210             215             220
94 Gly Leu Glu Ala Leu Val Pro His Val Ala Asp Asp Ala Ile Leu Gly
95 225             230             235             240
96 Arg Tyr Val Arg Asp Arg Gly Lys Asp Ile Ala Ile Ala Ala Cys Met
97              245             250             255
98 Thr Trp Thr Thr Val Gly Glu Thr Ser Met Arg Glu Val Leu Ala His
99              260             265             270
100 Glu Leu Arg Trp Gly Arg Thr Val Lys Thr Leu Glu Pro Ala Gly Tyr
101              275             280             285
102 Ala Ala Ser Ala Ile Gln Leu Pro Leu Phe Trp Ala Ser Val Ala Val
103              290             295             300
104 Leu Ala Ala Pro His Ala Thr Trp Thr Trp Ser Phe Phe Leu Gly Ala
105 305             310             315             320
106 Trp Gly Trp Arg Ala Val Cys Ser Phe Ile Leu Asp Arg Thr Leu Ala
107              325             330             335
108 Gln Arg Ser Leu Val Leu Pro Ser Leu Leu Leu Pro Leu Arg Asp Trp
109              340             345             350
110 Ile Ser Ala Ala Val Met Val Gly Ser Val Thr Gly Thr Arg Val Ala
111              355             360             365
112 Trp Arg Gly Gln Thr Met His Val Thr Pro His Ser Val Met Thr Pro

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123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
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136 <211> LENGTH: 26
138 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
145 <223> OTHER INFORMATION: Primer 2
148 <400> SEQUENCE: 4
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157 <212> TYPE: DNA
159 <213> ORGANISM: Gluconacetobacter entanii (Acetobacter altoacetigenes MH-24)
161 <400> SEQUENCE: 5
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165 gcaccttctg ctaccccacc cagaacgccg gcggctgggc tgtgcagcca tgatcgccaa      180
166 cccctccctc ttcttgagca attcgggaaga gcgatttccg ccgactgaac acgtcgaaaa      240
167 tggcagtttt ccaccgaaaa aaggaaaagga ccataggaaa ggattaatat cttattttta      300
168 tctagggggt tgccgatccg cgattttcgc tgggaaaccg ccaaaaatgg cttgccatta      360
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278 <213> ORGANISM: Artificial sequence

280 <220> FEATURE:

282 <223> OTHER INFORMATION: Primer B

284 <400> SEQUENCE: 7

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date